the clergyman, the social worker, the penologist and the statesman for "all we would ask is that 'these' give conscientious consideration to the facts of heredity as a guiding principle in the solution of the problems of the family with which they have to do. No questions are so hedged about with superstition, with irrational tradition, with religious dogma, as those which concern sex and reproduction; no problems are more delicate, more difficult, than those which seek the direction of human evolution; yet after all, man is an animal and must be dealt with as such. Civic law he may escape, to natural law there is no immunity." ORLAND E. WHITE.

## Recknagel's and Bentley's Forest Management\*

There is at present an active movement, led by professional foresters with Lt. Col. Graves, Chief of the U. S. Forest Service, at their head, for the application of forestry to privately owned timberlands in the United States. These lands contain three quarters of the standing timber in the United States, and are for the most part being cut without regard to the future. Whether or not Recknagel's and Bentley's "Forest Management" was planned by the authors as a part of this movement, aside from the avowed purpose of stimulating forestry practice in general, we do not know. In any case the book fits in admirably and is most timely.

The authors do not claim originality for their work, admitting that most of their material is already contained in the technical literature already published in this country. Nor do they aim at popular treatment. Their purpose is to present the subject in such a way that it can be understood and applied by the owners of forest lands who are not professional foresters. This does not apply to the farmer and owner of a small woodlot for whom Ferguson has already written "Farm Forestry."† In France the bulk of the forests are held by private owners as in this country, but forestry is universally practiced. Most of the

<sup>\*</sup> Recknagel, A.B., and Bentley, J., Jr., Forest Management, xiii + 269 pages, 26 figures, John Wiley and Sons, New York, 1919, net \$2.50.

<sup>†</sup> Ferguson, J. A., Farm Forestry, viii $\pm$  241 pages, illustrated, John Wiley and Sons, New York.

owners cannot afford the services of a highly trained forester. They themselves understand enough forestry to be able to manage their lands intelligently with the help of one or more forest guards or rangers. It appears to be the purpose of Recknagel and Bentley to assist in building up this type of owner in the United States. If this can be done the gain to the country will be incalculable.

The book gives briefly but clearly the essentials of the four branches of Forest Management, namely: (1) forest mensuration or the measurement of the tree crop including growth, (2) forest organization or regulation of the cut so as to secure regular periodic returns from the forest, (3) forest finance, a complex but important phase of the subject, and (4) forest administration or the organization and personnel of the force necessary to protect and control the forest.

It would be useless to pretend that such a subject as forest management can be readily understood and applied by the layman. It will require time and study, and often at the outset the assistance of expert advice. But this book will be of great assistance, and make possible to the forest owner an understanding of how to go about the matter, and of what returns he may expect on his outlay.

The book has still another field of usefulness. It is sufficiently detailed and accurate to be of much value to the professional forester as a convenient handbook of reference in which he may easily find certain formulae and tables which he could not possibly keep in his head. On the whole therefore the book is a valuable and welcome addition to forestry literature.

BARRINGTON MOORE

## PROCEEDINGS OF THE CLUB

## NOVEMBER II, 1919

The meeting was held at the American Museum of Natural History at 8.15 P.M., President Richards presiding. There were fifty persons present.